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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/634,871

08/06/2003

Noam Kedem

246/217

7627

7590

01/11/2006

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Discovery Dispatch

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EXAMINER

FIGUEROA, FELIX O

ART UNIT

PAPER NUMBER

2833

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,871

Applicant(s)

KEDEM, NOAM

Examiner

Felix O. Figueroa

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,4,8-10,13,16 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3,4,8-10,13,16 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13, 3, 4, 8-10, 16 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meng (US 6,231,399).

Meng discloses system board (col.2, line 57) comprising a connector (10) that includes: a first port (14) situated on the system board; a second port (16) facing inward to an interior of the system board; and a peripheral device (not shown) operationally connected to the inward-facing port. Meng does not disclose the first port being situated at an exterior edge of the system board and facing outward from the exterior edge. However, Meng discloses that "changes may be made in detail, especially in the matters of shape, size and arrangement of parts within the principles of the invention" (col. 3 lines 3-5). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the first port situated at an exterior edge of the system board and facing outward from the exterior edge, as a matter of inventors preference and/or to provide greater accessibility to the first port.

Regarding claim 3, Meng discloses the ports being substantially functionally identical.

Regarding claim 4, Meng discloses substantially the claimed invention except for the specific connector type. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to elect a specific connector type (for example a USB connector) base on environmental requirements/preferences, in order to provide a space efficient assembly.

Regarding claims 8 and 9, Meng discloses a host device / computer (col.1, line 10) comprising the system board.

Regarding claim 10, Meng discloses substantially the claimed invention except for the specific host device. Meng teaches that the arrangement provides an efficient space usage. It would have been obvious to one having ordinary skill in the art at the time of the invention to use the arrangement of Meng in different host devices, such as routers and mobile devices, in order to provide an efficient space usage.

Regarding claim 16, Meng discloses said first and second directions being opposite directions.

Regarding claim 18, Meng discloses said peripheral device is electrically connected to the system board only via said inward- facing port.

Regarding claim 19, Meng discloses a system board comprising a connector, the connector including: a first port (14) situated on the system board; and a second port (16), facing inward to an interior of the system board in order to accommodate a peripheral device that is electrically connected to the system board only via said second port. Meng does not disclose the first port being situated at an exterior edge of the system board and facing outward from the exterior edge. However, Meng discloses that

"changes may be made in detail, especially in the matters of shape, size and arrangement of parts within the principles of the invention" (col. 3 lines 3-5).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the first port situated at an exterior edge of the system board and facing outward from the exterior edge, as a matter of inventors preference and/or to provide greater accessibility to the first port.

Regarding claim 20, Meng discloses a system board comprising a connector (10), the connector including: a first port (14) situated on the system board; and a second port (16), facing inward to an interior of the system board; wherein said first and second ports face in respective first and second directions that are parallel to the system board. Meng does not disclose the first port being situated at an exterior edge of the system board and facing outward from the exterior edge. However, Meng discloses that "changes may be made in detail, especially in the matters of shape, size and arrangement of parts within the principles of the invention" (col. 3 lines 3-5). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the first port situated at an exterior edge of the system board and facing outward from the exterior edge, as a matter of inventors preference and/or to provide greater accessibility to the first port.

Regarding claim 21, Meng discloses a system board comprising a connector (10), the connector including: a first port (14) situated on the system board; and a second port (16), facing inward to an interior of the system board; and a mechanism (60), separate from said ports, whereby said connector is attached to the system board.

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Meng does not disclose the first port being situated at an exterior edge of the system board and facing outward from the exterior edge. However, Meng discloses that "changes may be made in detail, especially in the matters of shape, size and arrangement of parts within the principles of the invention" (col. 3 lines 3-5).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the first port situated at an exterior edge of the system board and facing outward from the exterior edge, as a matter of inventors preference and/or to provide greater accessibility to the first port.

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Regarding claim ~~22~~, Meng discloses a system board comprising a connector, the connector including: a first recess (14), for facilitating a mechanical and electrical connection of said connector to a first peripheral device, said first recess being situated on the system board; and a second recess (16), for facilitating a mechanical and electrical connection of said connector to a second peripheral device, said second recess facing inward to an interior of the system board. Meng does not disclose the first recess being situated at an exterior edge of the system board and facing outward from the exterior edge. However, Meng discloses that "changes may be made in detail, especially in the matters of shape, size and arrangement of parts within the principles of the invention" (col. 3 lines 3-5). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the first recess situated at an exterior edge of the system board and facing outward from the exterior edge, as a matter of inventors preference and/or to provide greater accessibility to the first recess.

Response to Arguments

Applicant's arguments filed 11/14/2005 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been skill of a worker in the art at the time the invention was made that placing the connector near an edge of the motherboard would improve accessibility to at least one of the ports. It is further noted that Meng does not restrict the connector's design to interior use only.

Additionally, a modification of the structure of Meng as proposed in the rejection of the claims is not contrary and does not preclude to the principle of operation of the connector of Meng.

In response to Applicant's arguments regarding claim 3, please note that the claim does not recite any language to differentiate the inwardly facing port and the outwardly facing port.

In response to Applicant's arguments regarding claim 4, it is noted that the USB connector is not restricted to exterior use only.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 Ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ffr



**THO D. TA
PRIMARY EXAMINER**